



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/692,677

10/27/2003

Show-Nan Chung

CHUAN 3062/EM

2052

23364

7590

03/22/2006

BACON & THOMAS, PLLC  
625 SLATERS LANE  
FOURTH FLOOR  
ALEXANDRIA, VA 22314

EXAMINER

WEINMAN, SEAN M

ART UNIT

PAPER NUMBER

2115

DATE MAILED: 03/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/692,677	<b>Applicant(s)</b> CHUNG ET AL.	
	<b>Examiner</b> Sean Weinman	<b>Art Unit</b> 2115	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-8 is/are pending in the application.  
     4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.  |

### DETAILED ACTION

1. **Claims 1-8** are presented for examination.

#### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. **Claims 1, 3, 7, and 8** are rejected under 35 U.S.C. 103(a) as being unpatentable over PalmGear.com (Resetting a Palm OS device) in view of Shin (US Patent No. 5,828,697).

4. **As per claim 1**, PalmGear.com teaches the claimed invention, comprising:

A circuit for combining on/off key and warm boot key to obtain a function of cold boot key in a portable information device (*Hard Reset Pressing a warm boot key (Reset) and the on/off key (Power) will perform a hard reset A circuit is in explicitly detailed in PalmGear.com but it would be obvious to one of ordinary skill in the art that a circuit must exist for a hard reset to recognize that the reset and power key are pressed simultaneously*).

5. PalmGear.com, however, does not teach a first switch connected to the on/off key for turning on and off the device, a second switch controlled by a warm boot key for turning on and off and a switch driving circuit connected to the first and second circuit additionally connected to the reset pin of the CPU. Specifically, PalmGear.com teaches a circuit which performs a cold boot to a CPU when the on/off key and warm boot key

Art Unit: 2115

are pressed simultaneously. PalmGear.com does not teach the first and second switch circuit along with the switch driving circuit.

6. Shin teaches a reset circuit for an electronic device having two reset switches, each having their own circuitry, and a signal combination circuit for receiving signals from each of the reset switch circuits. Additionally, Shin teaches that a reset signal is generated when both reset switch are pressed simultaneously.

7. Shin teaches the claimed invention, comprising:

a first switch circuit, which is controlled by the on/off key for turning on and off (*Figure 4 Reference character 70 and 80 and Col. 4 lines 23-28*);

a second switch circuit, which is connected to the first switch circuit and controlled by the warm boot key for turning on and off (*Figure 4 Reference character S4 and Col. 4 lines 19-23*); and

a switch driving circuit which is connected in parallel with the first switch circuit and the second switch circuit and has an output terminal connected to a reset pin of a central processing unit (CPU) (*Figure 4 Reference character 40 and Col. 4 line 28-34*), such that the switch driving circuit is turned on when the first switch circuit and the second switch circuit are simultaneously turned off, and the output terminal thus outputs a signal to cold boot the portable information device (*Figure 4 and Col. 5 lines 63-67 and Col. 6 line 1-3*).

8. In summary, Shin teaches teach a first switch connected to the reset key for turning on and off the device, a second switch controlled by a second reset key for turning on and off and a switch combination circuit connected to the first and second

Art Unit: 2115

circuit additionally connected to the reset pin of the device wherein a hard reset occurs when the reset keys are pressed simultaneously.

9. It would have been obvious to combine the teachings of PalmGear.com and Shin because they both teach a reset circuit for a device that performs a hard reset when two reset switches are pressed simultaneously. Shin teaches the deficiency of PalmGear.com by teaching the first and second switch circuit along with the switch driving circuit.

10. **As per claim 3**, PalmGear.com teaches the claimed invention, comprising:

wherein the warm boot key connected by the second switch circuit sends an interrupt signal to the CPU when system re-boots, so as to store system information in memory and clear temporary data in the memory (*PalmGear.com does not explicitly teach storing system information and clearing temporary data but it would be obvious to one of ordinary skill in the art that a soft reset would store system information while clearing the temporary data in memory*).

11. **As per claim 7**, PalmGear.com teaches the claimed invention, comprising:

first switch circuit has a line connected to a first pin of interrupt signal of the CPU, to send an interrupt signal to the CPU for reset (*PalmGear.com does not explicitly teach a interrupt signal to sent from the first switch circuit but it would be obvious to one of ordinary skill in the art that a interrupt signal would be necessary for the CPU to receive the on/off key signal*).

12. **As per claim 8**, PalmGear.com teaches the claimed invention, comprising:

Art Unit: 2115

second switch circuit has a line connected to a second pin of interrupt signal of the CPU, to send an interrupt signal to the CPU (*PalmGear.com does not explicitly teach a interrupt signal to sent from the second switch circuit but it would be obvious to one of ordinary skill in the art that a interrupt signal would be necessary for the CPU to receive the warm boot signal*).

13. **Claim 2** is rejected under 35 U.S.C. 103(a) as being unpatentable over PalmGear.com (Resetting a Palm OS device) in view of Shin (US Patent No. 5,828,697) as applied to claims 1, 3, 7, and 8 above, and further in view of Levidow et al. (US Patent Application Publication No. 2003/0084276).

14. **As per claim 2**, PalmGear.com and Shin teach the system for all of the reasons stated above. PalmGear.com teach PalmGear.com and Shin, however, do not teach that a display of the latest system information before shutdown appears when the system restarts. In summary, PalGear.com and Shin teach a reset system having two switch circuits that are controlled by power control keys and a switch driving circuit, which outputs a reset circuit when both keys are pressed simultaneously.

PalmGear.com and Shin do not teach that a display of the latest system information appears when the system restarts.

15. Levidow et al. teaches a system which displays the latest system information before shutdown during the startup of the computer system. Levidow et al. teach the claimed invention, comprising:

the on/off key connected by the first switch circuit provides a sleeping mode to display latest system information before shut-down on a screen of the portable

Art Unit: 2115

information device as soon as system re-starts (*Paragraphs [0004] and [0017] and Claim 4* Additionally, it would be obvious to one of ordinary skill in the art that the on/off key on a PDA commands the system to go into a sleep mode). In summary, Levidow et al. teaches that upon restart of a computer system the latest system information before the shutdown will be displayed to the user.

16. It would have been obvious to one of ordinary skill in the art to combine the teachings of PalmGear.com, Shin, and Levidow et al. because they teach systems and methods for user requested resets and restarts of CPUs. Levidow et al. teach the deficiency of PalmGear.com and Shin by teaching that a display of the latest system information appears when the system restarts.

17. **Claims 4-6** are rejected under 35 U.S.C. 103(a) as being unpatentable over PalmGear.com (Resetting a Palm OS device) in view of Shin (US Patent No. 5,828,697) as applied to claims 1, 3, 7, and 8 above, and further in view of Ikezaki (US Patent No. 6,144,237).

18. **As per claim 4**, PalmGear.com and Shin teach the system for all of the reasons stated above. PalmGear.com teach PalmGear.com and Shin, however, do not teach that the first and second switch circuit and the switch driving circuit consist of an NMOSFET. In summary, PalGear.com and Shin teach a reset system having two switch circuits that are controlled by power control keys and a switch driving circuit, which outputs a reset circuit when both keys are pressed simultaneously. PalmGear.com and Shin do not teach that the circuits consist of NMOSFETS.

Art Unit: 2115

19. Ikezaki teaches a reset circuit having two switching means having circuits that are controlled by their corresponding switches. Additionally, each of these switching circuit consists of MOSFET. Ikezaki teaches the claimed invention, comprising:

the first switch circuit and the second switch circuit consists of an NMOSFET (*Figure 1 and 2 and Col 7 lines 24-67 and Col. 8 lines 1-13*). In summary, Ikezaki teaches a first and second reset switch each having a switching circuit consisting of a NMOSFET.

20. Shin teaches the claimed invention of the switch driving circuit consisting of an NMOSFET (*Figure 7 and Col. 4 lines 35-67*). In summary, Shin teaches the switch driving circuit consisting of a NMOSFET.

21. It would have been obvious to one of ordinary skill in the art to combine the teaching of PalmGear.com, Shin, and Ikezaki because they all teach reset circuits for CPUs having two power control switches. Ikezaki teaches the deficiency of PalmGear.com and Shin by teaching the first and second switch circuits consist of NMOSFETS.

22. **As per claim 5**, Shin teaches the claimed invention, comprising:

the first switch circuit and the second switch circuit are connected in parallel and connected to a gate of the switch driving circuit (*Figure 4 and 5*).

23. **As per claim 6**, Ikezaki and Shin teaches the claimed invention, comprising:

Ikezaki teaches the claimed invention comprising:

the first switch circuit and the second switch circuit are all grounded directly (*Figure 1 and Figure 2 Ikezaki does not explicitly teach that the circuits are grounded*



Art Unit: 2115

*directly but it would be obvious to one of ordinary skill in the art that the circuits are grounded directly).*

Shin teaches the claimed invention comprising:

*the switch driving circuit is grounded directly (Figure 4 and Figure 7 Shin does not explicitly teach that the circuit is grounded directly but it would be obvious to one of ordinary skill in the art that the circuit is grounded directly).*

### **Conclusion**

24. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sean Weinman whose phone number is (571) 272-2744. The examiner can normally be reached on Monday-Friday from 8:00-4:30.

25. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Lee can be reached on (571) 272-3667. The fax number for the organization where this application or proceeding is assigned is (703) 872-9306.

26. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sean Weinman  
Examiner

Art Unit 2115

THOMAS LEE  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100

